



UNITED
CEREBRAL
PALSY
ASSOCIATIONS

Advancing the independence of people with disabilities

RECEIVED

NOV 27 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

November 27, 1996

DOCKET FILE COPY ORIGINAL

Commissioners
Federal Communications Commission (FCC)
1919 M Street NW
Washington, DC

RE: Implementation of Section 255 of the Telecommunications Act: "Access to Telecommunications Services, Docket No. 96-198, Telecommunications Equipment, and Customer Premises Equipment by Persons with Disabilities"
REPLY COMMENTS

Dear Sirs:

Enclosed are ten copies of our Reply Comments and a disk version (Wordperfect 5.1) in this matter.

If there are any questions, or concerns, please contact me directly.

Thank you.

Jenifer Simpson, Policy Associate
Government Activities
Community Services Division

No. of Copies rec'd 049
List ABCDE

Before the Federal Communications Commission
Washington, DC 20554

RECEIVED

NOV 27 1996

**FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY**

In The Matter of

Implementation of Section 255 of the)
Telecommunications Act of 1996)
"Access to Telecommunications Services,)
Telecommunications Equipment, and Customer)
Premises Equipment by Persons with Disabilities")

WT Docket No. 96-198

**REPLY COMMENTS BY UNITED CEREBRAL PALSY ASSOCIATIONS
ON THE NOTICE OF INQUIRY**

November 27, 1996

Jenifer Simpson
Technology Policy Associate
United Cerebral Palsy Associations
1660 L Street, N.W., Suite 700
Washington, DC 20036
Tels: (800) USA-5UCP or (202) 776-0406. Fax: (202) 776-0414

TABLE OF CONTENTS

	PAGE NUMBER
INTRODUCTION	
FCC SHOULD REVIEW AND ADOPT REGULATIONS OF THE TELECOMMUNICATIONS ACCESS ADVISORY COMMITTEE	4
MARKETPLACE DOES NOT RESPOND READILY TO PEOPLE WITH DISABILITIES	4
ACCESSIBILITY AND USABILITY SHOULD BE ADDRESSED ACROSS PRODUCTS, NOT PRODUCT LINES	6
CONSUMER PREMISES EQUIPMENT OR CPE SHOULD INCLUDE SOFTWARE	7
ELECTRONIC SPEECH DEVICE USERS MUST HAVE EQUAL ACCESS TO VOICE WIRE AND WIRELESS LINES AND OTHER FORMS OF COMMUNICATION CARRIAGE	8
READILY ACHIEVABLE IS WITHIN THE FRAMEWORK OF UNIVERSAL DESIGN	9
MANUFACTURERS WHO SELL IN INTERNATIONAL MARKETS SHOULD NOT BE EXEMPT FROM ACCESSIBILITY REQUIREMENTS	10
COMPLAINTS AND BURDEN OF PROOF CANNOT BE PUSHED ONTO PERSONS WITH DISABILITIES AND A NEW PROCEDURE SHOULD BE ADOPTED FOR PERSONS WITH DISABILITIES	10
CONCLUSION	11

INTRODUCTION

United Cerebral Palsy Associations (UCPA) submits Comments^{/1} as a Reply in furthering issues raised in the Federal Communications Commission (FCC) October Notice of Inquiry.

UCPA thanks the Federal Communications Commission ("Commission") for this additional opportunity to provide comments in the matter of accessibility of telecommunications services, telecommunications equipment, and customer premises equipment. UCPA's mission is to advance the independence, productivity and full citizenship of people with disabilities and is committed to this endeavor since founding of the organization more than fifty years ago.

One of UCPA's major policy agendas is to reduce barriers to telecommunications so that people with disabilities will be able to benefit from the goods and services commonly available in the telecommunications marketplace without having to pay for expensive add-ons or suffer communications cut-off due to a lack of electronic curb cuts.

As a member of the Telecommunications Access Advisory Committee (TAAC) of the United States Architectural and Transportation Barriers Compliance Board, UCPA is pleased to participate in the dialogue between and among industry and the disability community regarding needs and solutions in developing accessibility guidelines under Section 255.

UCPA supports the cooperative process at the TAAC which is developing draft guidelines for accessibility of telecommunications equipment and customer premises equipment. In the electronic global village, characterized by extraordinary diversity, it simply makes good sense to design products, services, communications and information systems for a broad range of abilities.

UCPA's more detailed response to issues raised in the initial comment period follows.

^{/1}
_ This document is available in alternate format (disk or large print).

I. FCC SHOULD REVIEW AND ADOPT REGULATIONS OF THE TELECOMMUNICATIONS ACCESS ADVISORY COMMITTEE

Representatives of the telecommunications industry and consumers with disabilities serving on the Access Board's Telecommunications Access Advisory Committee (TAAC) are making historic and meaningful progress in developing process- and performance- oriented accessibility guidelines. UCPA recommends that the FCC review these guidelines and adopt regulations to assist industry and consumers with disabilities alike in implementing the disability access requirements of Section 255.

If there are no clear rules, the complaint process will be no different than the current situation where consumers with disabilities have an issue or complaint that goes nowhere, where consumers with disabilities continue to play catch up to changing technology, and where the communications industry fails to comprehend the meaning of the universal design approach. Both houses of Congress had specifically called for Commission regulations to implement the disability access provisions in their respective legislative vehicles. The intent of Congress was for the Commission to take action on behalf of consumers with disabilities as deregulation was undertaken and competition promoted within the industry. The provisions in the Telecommunications Act demonstrate Congress' recognition that the generic needs of consumers with disabilities had not been addressed over sixty years of Communications law.

Rulemaking is essential for manufacturers and service providers to have parity in understanding what their obligations are in addressing disability access. The TAAC is drafting detailed recommendations for the Access Board for use in creating proposed accessibility guidelines for telecommunications equipment and customer premises equipment. In particular, as equipment and services converge, resolution of accessibility problems are likely to emerge as paramount issues; without a rulemaking and a formal process sensitive to disability issues persons with disabilities will be left out of a world that is increasingly dependent on information technology. Provision of rational and flexible directions for process, performance and compliance guidelines will give manufacturers and service providers the help they need and give consumers with disabilities ways to compete as equals with those without disabilities in the information age.

II. MARKETPLACE DOES NOT RESPOND READILY TO PEOPLE WITH DISABILITIES

As an example of the inability of the market to respond readily to consumer complaints related to disability, the interactions by disability consumers with Microsoft may typify what lack of a direct federal mandate leads to: In their comments Microsoft avers that their disability accessibility initiatives resulted from market pressure and was not related to government intervention. They also argue that competitive forces in the market are sufficient to protect the needs of people with disabilities as a reason for not promulgating regulations under Section 255.

While the estimable efforts of the accessibility team at Microsoft are appreciated by persons with cerebral palsy, especially with regard to certain Windows 95 Disability Access features^{/2}, UCPA notes that the market pressure to which Microsoft refers could not have occurred without several disability groups ensuring compliance with Section 508 of the Rehabilitation Act.^{/3} It was this diligence to the implementation of Section 508 that ensured that Microsoft address disability access issues. UCPA refers readers to the Comments and Reply Comments of the **Massachusetts Assistive Technology Partnership** and the **National Council on Disability** for a detailed discussion of this endeavor.

UCPA notes how job loss, lack of promotions, in addition to fewer anticipated hires due to the increased use of Microsoft's Windows 3.1 in the workplace was not responded to by Microsoft and the discovery that Windows 95 would not address the most significant barrier to accessibility -- screen reader compatibility with Windows and Windows-based applications -- created much consternation. The strategies and efforts of these groups to obtain a response from Microsoft, even in the presence of indirect government requirements, are hardly evidence of a marketplace that operates effectively in meeting the needs of customers who happen to have people with disabilities as the end users of systems.

UCPA notes that without the federal legislative requirements, there would have been no tools for these disability entities to work with to achieve the pressure that Microsoft is now claiming as the 'market pressure' to stimulate their disability accessibility initiative.

UCPA, among other advocacy groups, has always recognized how Section 508 has the potential to effect change in the marketplace through the possibility of impacting design of equipment for a broad range of abilities when companies do not undertake universal design on their own initiative. The federal government, as a major purchaser of technology and employer of many individuals, including those with disabilities, can be seen as stimulating industry to respond to accessibility requirements. UCPA similarly foresees that as businesses and state governments implement accessible environments in response to the requirements of the P.L. 101-336, The

^{/2} In particular, the user preference options for 'sticky fingers', use of number pad for cursor operation, cursor programming functions and similar keyboard features that allow for minimal key stroke usage by persons with limitations in fine motor control.

^{/3} Section 508 of the Rehabilitation Act [29 U.S.C. 794d]. Section 508 is an amendment to the Rehabilitation Act of 1973 adopted by Congress in 1986 (P.L. 99-506) to promote equal access for people with disabilities to federal jobs, including public information services and electronic tools. Section 508 establishes federal-wide procurement policy for computer accommodation to ensure that individuals with disabilities may use electronic office equipment with or without special peripherals. The guidelines apply to federal agencies as they acquire information technology and services. The needs of persons with disabilities for access to work-related and public information resources must be met in agency procurement. Section 508 requirements were amended in 1990 by the Congress to include more than hardware and software and to also include network functionality. As part of its mission to ensure productivity of persons with disabilities is advanced, UCPA continues to monitor the activities of the U.S. General Services Administration in its implementation of Section 508.

Americans With Disabilities Act (ADA), efforts for developing accessible information systems will become even stronger.

UCPA believes that the mandate found in Sec. 255, to design access, usability and compatibility at the start of design is a clear and mature construction that enables the telecommunications industry and the disability community to work together on the universal design mandate of the new telecommunications law. UCPA notes also that there are still unresolved issues for persons who are blind who use Microsoft products, and similarly by other visually-based product manufacturers^{/4}. UCPA can only wonder what market force is operating when such companies are deaf to the customer complaints of persons who have vision disability.

III. ACCESSIBILITY AND USABILITY SHOULD BE ADDRESSED ACROSS PRODUCTS, NOT PRODUCT LINES

Some industry commentators are proposing that access across a product line is enough (for instance, CEMA, Motorola). UCPA believes that provision of accessibility, usability and compatibility on a product-by-product basis, to the extent that it is readily achievable, is essential to the successful implementation of the provisions under Section 255. When accessibility, usability, and compatibility are not readily achievable for a specific product, UCPA urges review across product lines, but not at the cost of failing to address accessibility per product.

As a product line would be determined by manufacturers it would offer a way out of compliance. A manufacturer, or group of manufacturers, could conceivably classify a huge number of products as being in the same line simply for the purpose of avoiding checking for disability accessibility, usability and compatibility. To ask manufacturers to first apply the readily achievable test on a product-by-product basis is not unreasonable. However, as part of determining if a product can be made accessible, usable or compatible, a manufacturer may consider other products in the same product line to see if they can be made accessible, usable or compatible. UCPA believes that when accessibility is considered on a product-by-product basis engineers are far likelier to utilize universal design principles, and that this will result in the widest benefit across product lines.

In Section 255 (b) and (c) **manufacturers** and **service providers** are made responsible for accessibility, not some other entity or the marketplace. Product lines were not part of Congressional intent here either as Section 255 (c) requires service providers to ensure that "the service" is accessible. This is all about choice for consumers with disabilities the way choice

^{/4} For instance, Adobe Acrobat, a graphics format found on CD-ROMS, despite the claim of Adobe that the product is accessible, apparently is *not usable* by the average person who is blind with typical equipment used for screen-reading.

is available to consumers without disabilities. UCPA recognizes, however, that some solutions to accessibility, usability and compatibility may include development of modularity or components that will work through either wireline or wireless connection.

Some industry commenters continue to support development of specialized equipment designed for individuals with disabilities as the way to meet disability access requirements. They appear to miss the point of the universal design approach made explicit in the provisions where first access is required for equipment and services used by everyone else and if that is not readily achievable, then it must be made accessible to equipment used by persons with disabilities. The starting point for the obligation for access is not specialized consumer premises equipment; it is devices and services used by everyone else.

UCPA also notes and refers readers to the comments in our previous submittal to the FCC on October 28, 1996 about the costs of specialized equipment for persons with cerebral palsy and with other disabilities^{/5}: cost-shifting of high-priced adaptive equipment to end users with disabilities is often asking the taxpayers to pay for what the market is failing to address through a universal design initiative.

IV. CONSUMER PREMISES EQUIPMENT OR CPE SHOULD INCLUDE SOFTWARE

UCPA believes that assertions by some industry commenters that CPE should not include software lack forward thinking as there are many who understand that software is in fact CPE and hardware can be understood as an empty shell that needs software to activate it. While hardware must be universally designed for accessibility, usability and compatibility, the purpose of the 'hardware' cannot be separated from the functional operability of the appliance unless expensive paperweights are the design objective. Functionality is a synergy of 'hardware' and

^{/5} Comment in Response to FCC Paragraph 17 October 26: Any discussion about cost estimates should address a number of factors such as the benefits of assistive devices, accessibility features and other accommodations to individuals with disabilities in the aggregate. Factors to include would be the determination of direct and productivity-related benefits, the cost savings or 'avoided costs' or 'opportunity costs' for individuals with disabilities, in addition to benefits to society and other measures. ... Costs to accommodate persons with disabilities access to telecommunications -- to permit 'a voice' and 'to be heard' in current voice-telephony based universal service -- includes out-of-pocket costs of the individual with a disability in addition to costs borne in public programs for assistive or adaptive devices. For instance, deaf and hard-of-hearing people pay high costs for Text Telephones or TTYs (an average of \$200 to \$500 each) or for telebrailles (\$6,000 each); those with speech disabilities may pay as much as \$10,000 for a digital linguistics-based augmentative communication device; for those with vision disability screen viewers to read computer information the average cost is \$5,000, that is assuming the on-screen material is text-based. For a person with a motor disability and speech capability, voice activated dialing -- available to every subscriber -- at \$4.95 per month compares well with the cost of an adaptation to the phone which costs \$250, or if through a computer system, \$1,000. If more of these modalities were built into the networks these costs, and the increased access could be used by everyone.

'software' in any information access appliance or instrument; as such, divorcing the purpose of an information appliance or instrument from elements such as 'software' and 'hardware' is simply a way to avoid addressing universal design and in the discussion of Section 255 issues, simply a strategy to try and avoid compliance. The FCC should guard against attempts by some members of the industry to artificially separate the purpose of an instrument with the intention of avoiding disability access requirements.

In fact, there are few in the field of telecommunications who have not remarked that CPE is becoming increasingly software dependent for its operation. Although Congress did not include software in the definition of CPE, as it did in the definition of Telecommunications Equipment, the omission is not related to accessibility requirements. UCPA urges the Commission to ensure that the disability access requirements extend to the software necessary to operate and use CPE.

V. ELECTRONIC SPEECH DEVICE USERS MUST HAVE EQUAL ACCESS TO VOICE WIRE AND WIRELESS LINES AND OTHER FORMS OF COMMUNICATION CARRIAGE

Persons with speech disabilities who use electronic Alternative & Augmentative Communication (AAC) devices generate digital emissions of speech via the keyboards of their devices. This digital output, or information, can be transmitted via voice telephony or directly onto computer networks via a special link from the AAC device to a computer and its modem and which often utilizes advanced linguistics-based software to express the voice, and opinions, of these AAC users.

It is very difficult for consumers who are users of these devices to understand attempts by the industry to limit or preclude consideration of this information transmittal -- which is a digital voice originating from the keyboard of the end-user -- as a form of information that must be transmitted.

UCPA believes that prosthetically-assisted voices must be carried on voice wire and wireless lines, and other forms of communication carriage, the same way as biologic voices. That such voices, facilitated by digital output devices, are also electronic information is secondary to the purpose of the device, which is to manifest the free speech of persons with severe speech disability. Attempts to limit the scope of digital information exchange are highly detrimental to this group of consumers.

UCPA urges the FCC to consider closely any regulations resulting from any provisions in the Telecommunications Act that impact users of electronic Alternative & Augmentative Communication (AAC) devices to ensure that the free speech rights of these consumers with disabilities are not curtailed inadvertently by improper distinctions between originators of digital information transmission.

VI. READILY ACHIEVABLE IS WITHIN THE FRAMEWORK OF UNIVERSAL DESIGN

It is within the development of PROCESS- and PERFORMANCE-oriented accessibility guidelines, as being conducted by the TAAC, that a new understanding of 'readily achievable' becomes apparent. These process and performance guidelines demonstrate *that the term "readily achievable" in relation to telecommunications products and services acts as a partial modifier to the conceptual framework within which universal design is conducted.* "Readily achievable," to be properly understood within the field of telecommunications, is not applied at one single time to a product but at multiple points in determining the factors within design, development and fabrication. Furthermore, the requirement establishes that manufacturers and providers must do this at the earliest stages of the process, which means addressing performance and outcomes and how a product or service can be used by persons with disabilities. Additionally, the flexibility of the standard does not stifle innovation and competitiveness as it is left up to the individual company to address disability access within its own process and performance systems.

Several commenters referred to the Department of Justice's rule implementing the readily achievable provisions of ADA which sets a list of priorities for implementation of the readily achievable exemption under ADA. However, there is a critical conceptual difference with the use of the term 'readily achievable' in the Telecommunications Act because the ADA exemption applies to **existing facilities** and the provisions of Section 255 apply to **the design, development and fabrication of equipment and services.**

VII. MANUFACTURERS WHO SELL IN INTERNATIONAL MARKETS SHOULD NOT BE EXEMPT FROM ACCESSIBILITY REQUIREMENTS

There is little doubt that development of the electronic communications infrastructure between countries of the world is underway and that a global information marketplace exists. World-wide information sharing and intercommunication foster tremendous economic and social benefits for all nations and persons, regardless of geographical borders and abilities. UCPA notes that there are millions of individuals with disabilities worldwide, with functional differences in speech, hearing, vision, movement, manipulation, and interpretation of information.

It is foolish for companies not to incorporate universal design in selling in the global market when there are more than 500 million persons worldwide who have disabilities, according to the World Institute on Disability. This includes 55 million who are blind, 70 million who are deaf, and 160 million with mobility impairments. Universal Design means making communications accessible to and usable by persons with disabilities. It also means making access and usability

for millions of persons who may be economically disadvantaged or non-English speaking or otherwise not technologically literate. To persist in marketing to the minority, that is, persons who are in upper echelon economic and educational brackets, and seemingly without functional limitations, is fundamentally poor planning for the future.

For instance, policymakers worldwide are likely to ask questions about linkage to telephone relay systems for those with hearing and speech disabilities, about hearing aid compatibility, about the use and practice of graphical user interfaces that can be a barrier for those with vision disabilities. They will ask about voice driven systems, and about the location and setting of public information access points for end-users that use wheelchairs, and about keyboard layout and functionality, kiosks and other software driven information technology that cannot be used easily by those with limited motor or sensory abilities. A comprehensive approach to accessibility means making all forms of expression, transmission and reception of electronic communications across world-wide networks accessible to persons with disabilities in all countries, and recognizes that every individual is capable of choosing the method, medium and content of communication most appropriate for himself or herself.

In particular, affordability means that individuals with disabilities shall pay rates no greater than the rates paid for functionally equivalent services provided to those without disabilities with respect to such factors as the duration of the call, product or service, the extent of technical connectivity, the time of day and geographic distance involved in achieving the call, telecommunications product or service.

VIII. COMPLAINTS AND BURDEN OF PROOF CANNOT BE PUSHED ONTO PERSONS WITH DISABILITIES AND A NEW PROCEDURE SHOULD BE ADOPTED FOR PERSONS WITH DISABILITIES

Several commenters urged the Commission to adopt a complaint resolution approach which would compel complainants to bear the burden of proof in bringing a complaint alleging inaccessibility. There are few persons with disabilities who could muster the knowledge and resources about a company's finances, engineering capacity, design process, marketing goals, and other proprietary information to effectively carry this out. The burden must lie with the defendant and is the prime reason why the Commission must establish clear regulations on the compliance process.

UCPA urges the FCC to develop a new procedure for formal complaints under section 255. In its NOI, the Commission requested comment on the need for complaint procedures under Section 255 which are separate and apart from the procedures for filing informal and formal complaints under Section 208. We have now learned that the cost of filing a formal complaint with the Commission under Section 208 is anywhere from \$140 to \$150.

As in the case of filing of complaints on telecommunications relay services, where this charge is excluded in the filing of formal complaints, UCPA urges that a similar alternative process for filing formal complaints should be established, and which also excludes any charges as persons with disabilities often lack sufficient resources. However, by no means should the process for filing a complaint under Section 208 be denied to persons with disabilities.

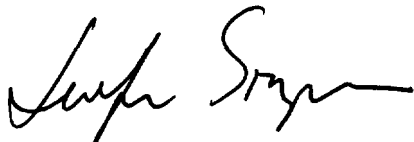
CONCLUSION

UCPA urges the FCC to review and adopt regulations from the guidelines developed by the Telecommunications Access Advisory Committee as it is developing both design process and performance recommendations. Additionally, the need for regulations was well established in the legislative history and because the marketplace has not responded well to people with disabilities. UCPA believes that accessibility and usability should be addressed across products, not product lines, and this is facilitated by clear regulations and guidelines. Furthermore, UCPA supports the position that consumer premises equipment or CPE should include software, and points out that readily achievable is within the framework of universal design and is not to be confused with guidelines for existing facilities. Additionally, manufacturers who sell in international markets should not be exempt from accessibility requirements. UCPA also urges establishment of a complaint process that allows for the lack of resources by persons with disabilities and which does not push the burden of proof onto persons with disabilities.

On a final note, UCPA urges the FCC to consider closely any regulations resulting from any provisions in Telecommunications Act that impact users of electronic Alternative & Augmentative Communication (AAC) devices to ensure that the free speech rights of these consumers with disabilities are not curtailed inadvertently by improper distinctions between originators of digital information transmission.

On behalf of United Cerebral Palsy Associations,

November 27, 1996



Jenifer Simpson, Policy Associate
Governmental Activities Department
Community Services Division
United Cerebral Palsy Associations
1660 L Street, N.W., Suite 700
Washington, DC 20036
Tels: (800) USA-5UCP or (202) 776-0406. Fax: (202) 776-0414

DOCUMENT OFF-LINE

This page has been substituted for one of the following:

- o An oversize page or document (such as a map) which was too large to be scanned into the RIPS system.

- o Microfilm, microform, certain photographs or videotape.

- ~~x~~ Other materials which, for one reason or another, could not be scanned into the RIPS system.

DISK

The actual document, page(s) or materials may be reviewed by contacting an Information Technician. Please note the applicable docket or rulemaking number, document type and any other relevant information about the document in order to ensure speedy retrieval by the Information Technician.